

# **Creating Pop-Up Word Pictures in PowerPoint**

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## Introduction

A visual language is described as the full integration of words, images, and shapes into a single unified communication unit<sup>1</sup>. The problem with electronic presentations, especially PowerPoint presentations, is that very little visualization is used, with alphanumeric and bulleted outlines predominating. The viewer is bombarded with words and phrases careening in all directions. Funny and obtrusive little figures pop in, fade out, and jump around without rhyme or reason. Instead of adding to the presentation, they are meaningless and distracting. Too often a PowerPoint presentation diverts attention away from the speaker and the real message. At times, instructors have simply read the bulleted outline from the screen, much to the dismay and boredom of the audience.

A viable alternative to the alphanumeric or bulleted outline presentation is the use of word pictures. A word picture is a graphic representation of ideas, data, and numbers that uses simple line art, geometric shapes, lines, arrows, clip art, symbols, and color to show a visuospatial relationship among the components. The technique emphasizes an economy of words and simplicity in the communication process.

Word pictures are not usually visually self-explanatory. They require supplementary oral dialogue for full comprehension. The selection of geometric shapes is arbitrary. Each geometric shape is assigned a meaning by the presenter. Repetition of the same shape, size, color, and placement equates the value of the components. Differences in shape, size, color, and placement disequates the value of the components. Relationships among the components are indicated by lines and/or arrows. Key words and phrases are embedded in the geometric shapes. Some key words or phrases can be left out and filled in by the students as an attention focusing device. Word pictures are reproduced in a student handout to reduce note copying behavior and to provide an advanced organizer for the presentation.

When there are more than about five or six components to a word picture, the key words and phrases may become too small to read at a distance in a PowerPoint presentation. Animation can be effectively used to focus attention on the component at hand. This document will explain how word pictures are created in PowerPoint and how animation is used to focus viewer attention.

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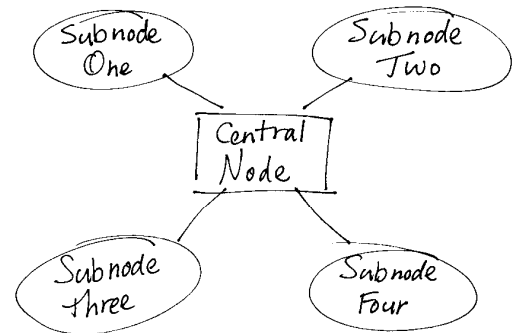
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<sup>1</sup> Horn, R.E. (1998). *Visual Language: Global Communication for the 21st Century*. Bainbridge Island, WA: MacroVu, Inc.

# Creating Pop-Up Word Pictures in PowerPoint

## Step One: Sketch a word picture.

1. Sketch a word picture on paper. For this exercise, your word picture should be two dimensional–flat with no depth using lines and shapes only–no cylinders, cubes, pyramids.
2. Check the logic of your word picture with a colleague, support staff. You will need to provide a verbal or written explanation of the word picture.
3. What is animation? Shapes and key words in the shapes appear on the screen on cue (a mouse click, push of a keyboard button, or at a pre-set time interval) in ways other than just appearing as flat colored shapes words. These include such things as wipes from left to right or top to bottom, dissolves, zoom out/in, stretch across, checker board. All of these animation effects can be used to create something we call a “pop up” (a single node zooms out to fill almost the entire screen for readability) word picture.
  - A. Why bother? When the screen is too busy with a lot of information that is not readable at a distance, but could be readable by an individual student from 18”, pop-ups can make each individual item readable as that item is being addressed by the presenter.
  - B. Examples of pop ups--Have you been popped up today?



This tutorial is based on the this hand-drawn word picture sketch.

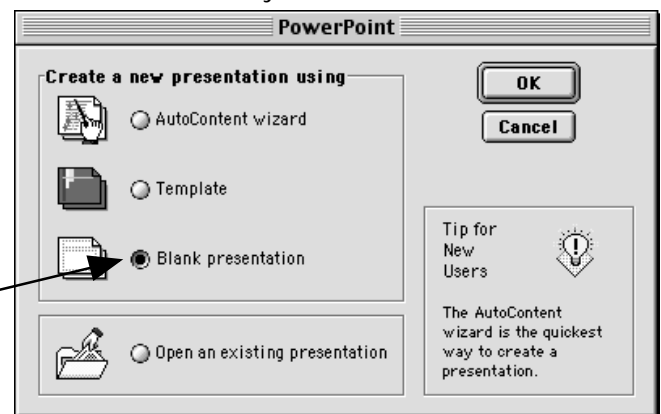
So far you know how to create a bulleted presentation and you have created a simple word picture verified by a colleague. Let's begin the pop up.

## Step Two: Creating a word picture in PowerPoint™

Given your two-dimensional sketched word picture, how do you want the subnodes in the word picture to appear in animation? See the CD for a number of examples of animated “pop-up” word pictures.

1. Launch PowerPoint with a new blank presentation and a blank slide. When you first launch PowerPoint, you will be stepped through two dialogue boxes:
  - A. The first dialogue box to appear is entitled “PowerPoint.” The default selection is “Blank Presentation.” Do not change this selection. Click the “OK” button in the upper right-hand corner.

In the “PowerPoint” dialogue box presented when you first launch PowerPoint, select “Blank Presentation,” then click the “OK” button.



In the "New Slide" dialogue box presented when you first launch PowerPoint, select the "Blank Slide" icon, then click the "OK" button.



- B. The second dialogue box to appear is entitled "New Slide." This dialogue box has a window that contains small icons representing different slide layouts. In the lower right-hand corner of this window, there should be an image of a slide with nothing on it. Select this "Blank Slide" icon by clicking on it once. Then click the "OK" button in the upper right-hand corner of the dialogue box.
- C. You should now have a new PowerPoint document with one blank, white slide in it.

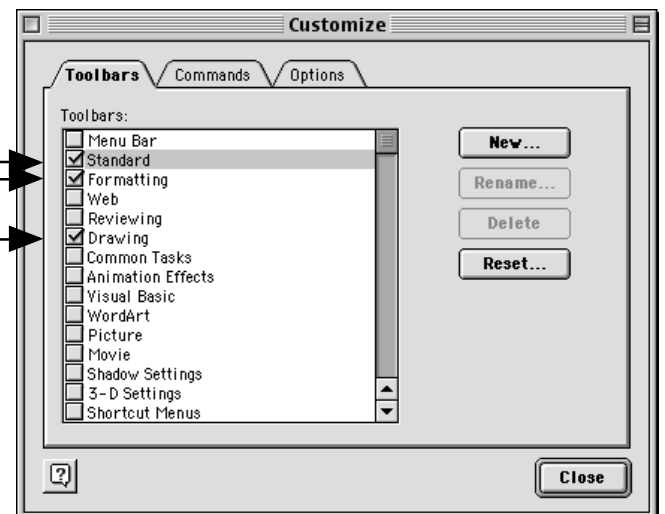
2. Set up your PowerPoint software.

- A. Move your cursor to the "Tools" menu on the top menu bar and click once. A menu will appear.
- B. Choose "Customize" from the menu. The "Customize" dialogue box will appear.
- C. Click once on the "Toolbars" tab to bring it to the front.
- D. You will need to activate the "Standard," "Formatting," and "Drawing" toolbars to use in creating your pop-up word picture slide. If the little square next to any of these items does not have a check-mark, click once in the square to "check" the item. As you "check" each item, the corresponding toolbar should appear on your computer screen. When each of these items has a check-mark in the square next to it, click once on the "Close" button at the lower right-hand corner of the dialogue box.



The "Tools" menu. To add additional "toolbars" to your PowerPoint working screen, select "Customize...."

In the "Customize" dialogue box, select the "Standard," "Formatting," and "Drawing" toolbars by clicking once in the small squares next to each selection so that a check-mark appears in the squares. Then click once on the "Close" button. The selected toolbars will be added to your PowerPoint working screen.

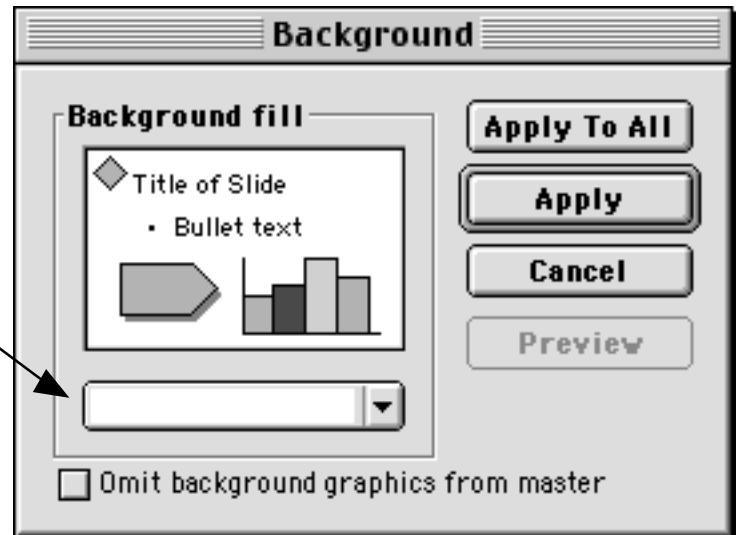


3. Choose a background color for the slide:
  - A. Click once on "Format" on the top menu bar. Scroll down to "Background..." in the menu list and click once on it. The "Background" dialogue box will appear.
  - B. In the "Background" dialogue box, click once on the horizontal bar in the "Background Fill" section of the dialogue box. A menu will appear. In the middle of the menu is a row of small squares filled with different colors. These are the default color choices for the slide background color. Usually a dark color works well for the background, so click once on the dark blue square (sixth square from the left). Click the "Apply" button to change the background of your slide to the selected color.
  - C. Your previously white slide should now be blue.



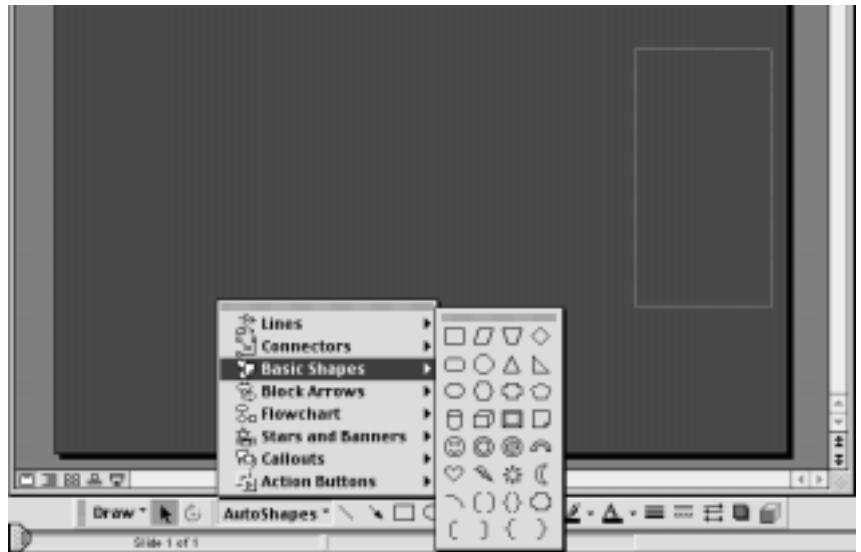
The "Format" menu. To change the background of your slide, select "Background..."

In the "Background" dialogue box, click once on the horizontal bar and select a color from the color menu that appears. Click the "Apply" button to change the background of your slide to the selected color.

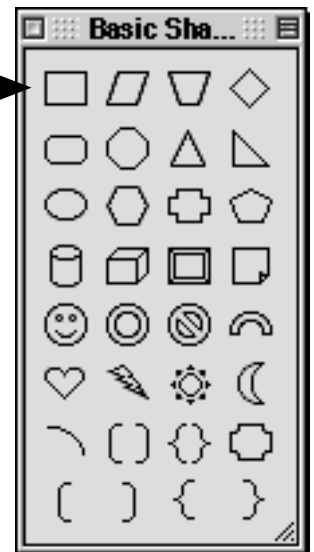


4. Create your word picture in PowerPoint. In creating your word picture, you will be using the "Drawing" toolbar menu items located at the bottom edge of the screen—look down.
5. You will begin by creating the main or central node.
  - A. Drawing the geometric shape of the main node.
    - 1) Read this entire paragraph before proceeding. Find the word "Autoshapes" at the bottom left hand part of the screen. Place your cursor over "Autoshapes" and click and hold the mouse button down. While holding the mouse button down, scroll (move your cursor up) to "Basic Shapes." The "Basic Shapes" menu will appear that contains a variety of geometric shapes. Still holding the mouse button down, move your cursor onto the top bar of the "Basic Shapes" menu. Still holding the mouse button down, drag the "Basic Shapes" menu anywhere away from the original location. Release the mouse button. The entire shapes menu is now available so you don't have to go through multiple menu selections for each desired shape. This is called "tearing off" the menu. The "Basic Shapes" menu can be repositioned anywhere on the screen by clicking and dragging it by the shaded area at the top of the menu box. For convenience

To “tear off” the “Basic Shapes” menu, place your cursor over “Autoshapes” and click and hold the mouse button down. While holding the mouse button down, scroll (move your cursor up) to “Basic Shapes.” Still holding the mouse button down, move your cursor onto the top bar of the “Basic Shapes” menu. Click and drag the “Basic Shapes” menu anywhere away from the original location.



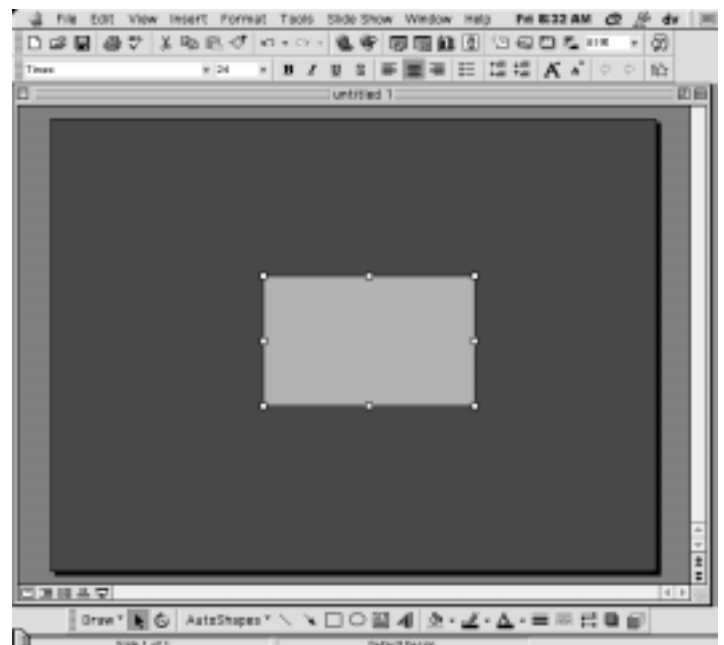
Choose a shape from the Basic Shapes menu by clicking on the desired shape once. For this tutorial, choose the rectangle for the central node shape.




and to keep the slide area free for drawing, place the “Basic Shapes” menu box somewhere near the edge of your computer monitor.

- 2) Choosing a shape: Select a shape, in this example a rectangle, by clicking on it once. The cursor will change from an arrow to a crosshairs when it is moved back over the slide area of the monitor. Click and drag on the slide area to create the chosen shape to the desired size on the slide.

Click and drag to create a rectangle approximately in the center of the slide.



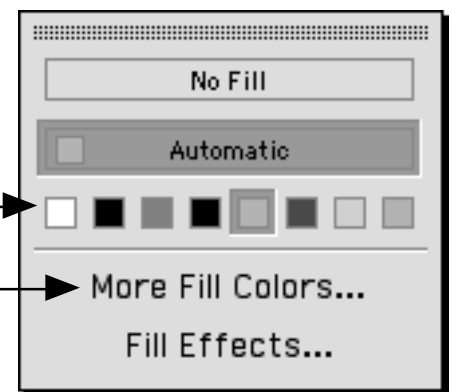
B. Changing the color of the geometric shape.

- 1) Select the geometric shape by clicking once on it. As you move the cursor over the shape, notice that the cursor turns into a crosshairs with small arrows on the ends of the lines, indicating that the object is selectable. When you click on the object, eight small square white "handles" will appear around the shape, indicating that it is selected.
- 2) Go to the bottom menu and locate the "Fill Color" icon. This looks like a tiny paint bucket pouring paint . Click on the little arrow to the right of the "Fill Color" icon. A menu appears with a variety of possible colors. Select one of the colors visible on the menu by clicking once on the chosen color. Click once on the "OK" button to apply the color. Other colors are available by clicking on "More Fill Colors."

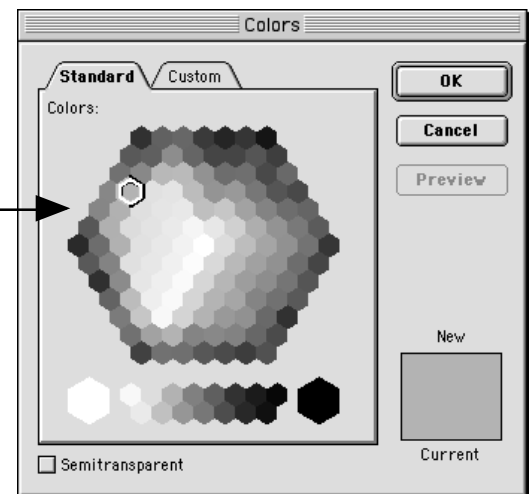
To change the fill color of a shape, click on the arrow beside the "Fill Color" tool.




Choose a fill color from the "Fill Colors" menu by clicking on the desired color. To reveal more color choices, click on the "More Fill Colors..." option.



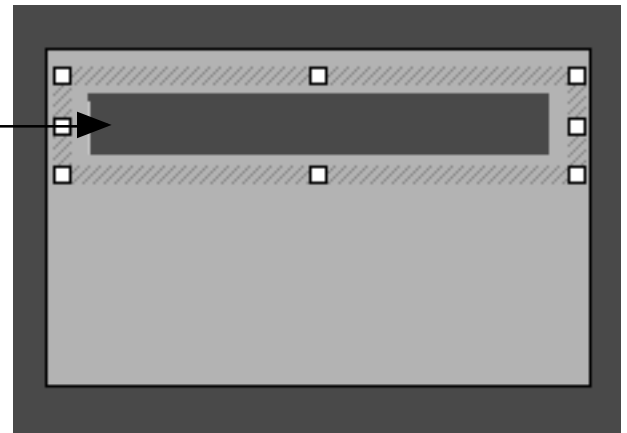
Choose a fill color from the "Colors" menu by clicking on the desired color, then click the "OK" button to apply the color to the selected shape.



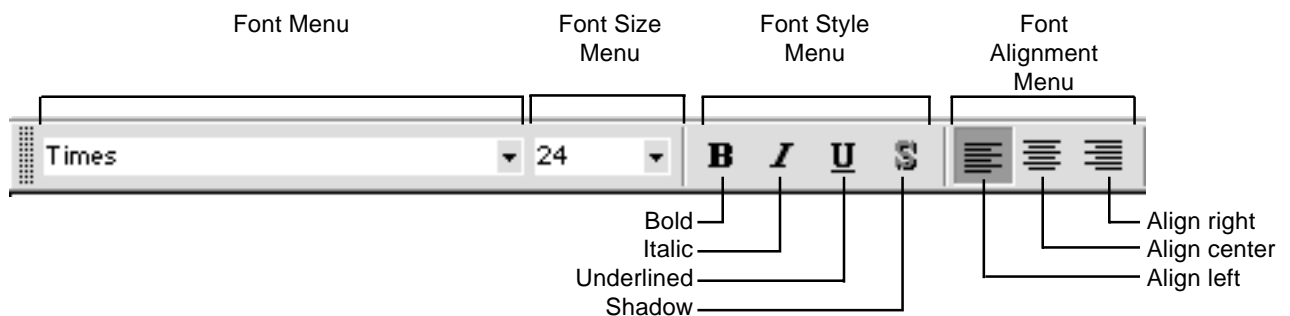
C. Adding text to the main node.

- 1) On the "Drawing" toolbar at the bottom of your monitor, select the text box tool. It looks like a tiny square with a small capital "A" . The cursor will change to an upside down "t" when it is moved over the slide area. Click and drag a box for the text over the rectangle you have just completed. When you release the mouse, a box with a border and a blinking text insertion cursor will appear. Type the desired text into the box.

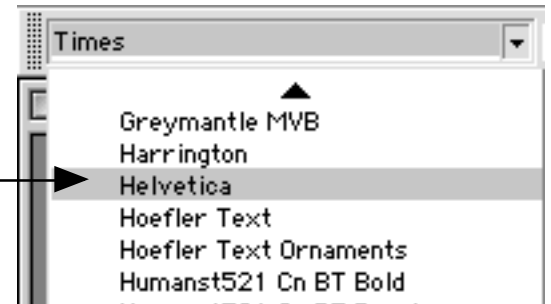
Using the text box tool, click and drag a text box over the geometric shape for the central node. Type in the text.



- 2) Format the text by changing the font, font style, size, alignment, and color as you would with text for a bulleted outline. You will want the text in the main node to be readable from a distance. The text must be selected to apply any changes to it.



Change the text to a bold, block text, such as Helvetica or Arial.

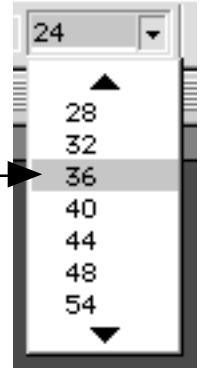


- a. With the cursor over the text you just entered, click once.
- b. Select all of the text by hitting the "Command" key and the "A" key simultaneously.
- c. With the text selected, choose a font from the font menu at the upper left-hand corner of the slide window. The default font is "Times." Click once on the tiny arrow to the right of the font menu. A menu of fonts will appear. If you have many fonts, the menu will have a small arrow at the top and/or bottom that indicates you can scroll up or down to reveal more choices. Scroll up or down by placing your cursor over the small arrow at the top or bottom of the window. Change the font to something simple and bold, with square ends to the letters instead of little points. "Arial" and "Helvetica" are good choices. Select the font you want to use by clicking once on it.



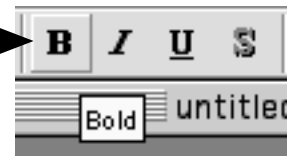
- d. Change the size of the font. To the right of the font menu, there is a font size window that by default shows the numerals "24." This means the text you typed by default will be 24 points tall. You will probably want to make the text bigger than this so the text can be seen at a distance. Click once on the tiny arrow to the right of the font size window. A menu of font sizes will appear. There will be a small arrow at the bottom of the selection list indicating that more choices are available by scrolling. To scroll the menu, place your cursor over the small arrow. For this example, choose 36 point by clicking once on "36."

Change the font size to a large size. For this tutorial, choose 36 point.



- e. Change the style of the font. To the right of the font size menu, there are four icons represented by the letters "B," "I," "U," and "S." These stand for "Bold," "Italic," "Underline," and "Shadow" respectively. For this example, make the text bold by clicking once on the "B" icon.

Change the font style. For this tutorial, choose Bold.



- f. Change the alignment of the text within the text box. To the right of the style icons there are three small alignment icons for left, center, and right alignment, in that order. For this example, center align the text within the text box by clicking once on the middle alignment icon.

Change the text alignment. For this tutorial, choose Center Alignment.



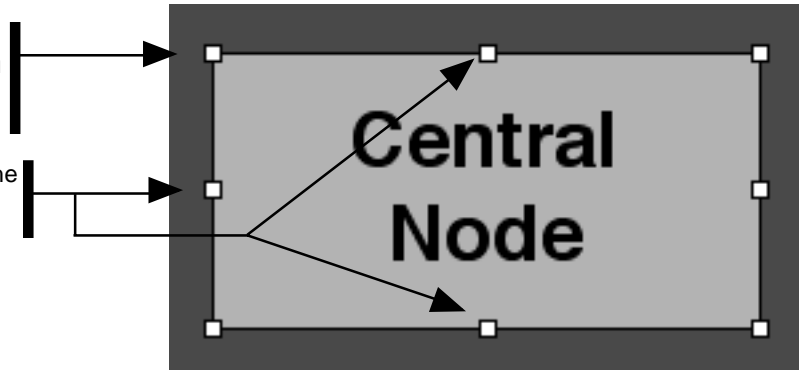
- 3) Resize the text box to fit the text. If the text doesn't fit within the text box that you drew, or breaks at an inconvenient place, you will need to resize the text box.
- While holding down the "Option" key, click once on the text within the text block. A shaded bounding box will appear around the text and eight small white square "handles" will appear around the text box.
  - You can resize the box by clicking and dragging the "handles." Click and hold down the mouse button over a handle. With the mouse button down, drag the handle to resize the box. The corner handles allow you to resize the box in two dimensions-up/down and left/right-at the same time. The side, top, and bottom handles restrict resizing to one dimension: either up/down for the top and bottom handles, or left/right for the side handles.

D. Fit the geometric shape to the text.

- 1) To adjust the size of the geometric shape, click once on the shape near its outside edge to avoid inadvertently selecting the text block. Eight white, square handles will appear around the geometric shape. Click and drag the handles to fit the shape to the text. Click and hold down the mouse button over a handle. With the mouse button down, drag the handle to resize the box. The corner handles allow you to resize the box in two dimensions—up/down and left/right—at the same time. The side, top, and bottom handles restrict resizing to one dimension: either up/down for the top and bottom handles, or left/right for the side handles.

To change the size or dimensions of a geometric shape, click and drag the handles. The corner handles allow you to change the shape in TWO dimensions (up/down AND left/right) at the same time.

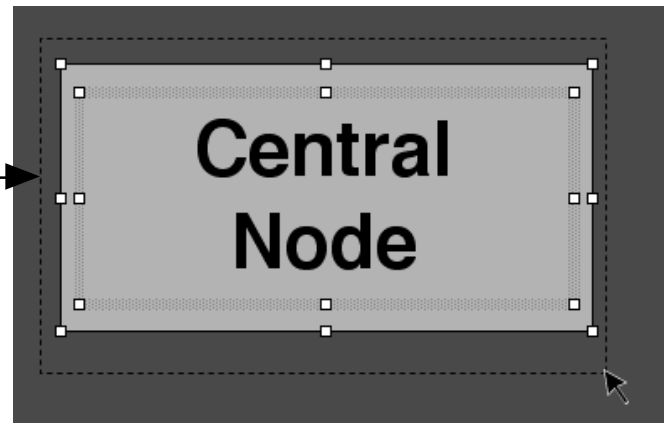
The side and top/bottom handles allow you to change the shape in ONE dimension (up/down OR left/right) independently of the other.



E. Center the text box in the geometric shape.

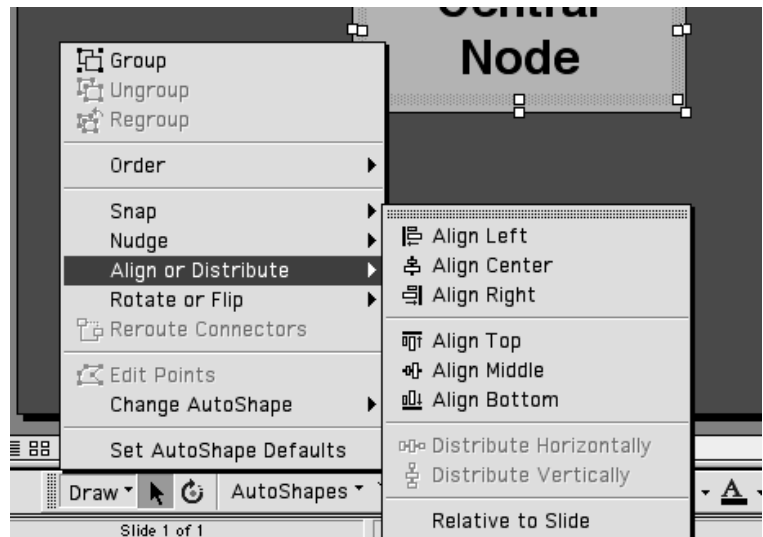
- 1) Select the text box and the geometric shape box by clicking and dragging the cursor to enclose the entire area of both the geometric shape and the text box.

Select the text box and the geometric shape box by clicking and dragging the cursor to enclose the entire area of both the geometric shape and the text box.




- 2) On the "Drawing" toolbar at the bottom of the screen, Go to the "Draw" menu item on the left hand side of the toolbar and the click once. The "Draw" menu box will appear.
- 3) Scroll to the "Align or Distribute" menu item. Click and hold the mouse key down and "tear off" the "Align or Distribute" menu as you did with the "Autoshapes" menu. To review how to tear off a menu, see step 5.A.1) above. When you tear off this menu, it will change to a bar with a number icons instead of words.

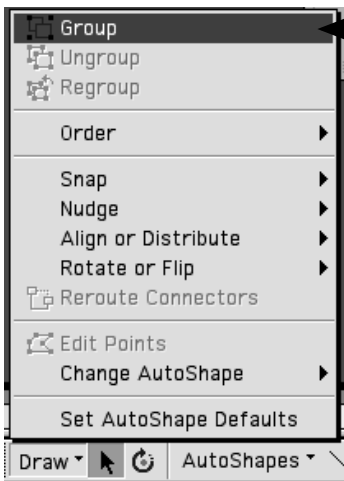
From the “Draw” menu, tear off the “Align or Distribute” menu.



The “Align or Distribute” menu turns into an icon-driven menu bar. Click on the second icon to center align objects.

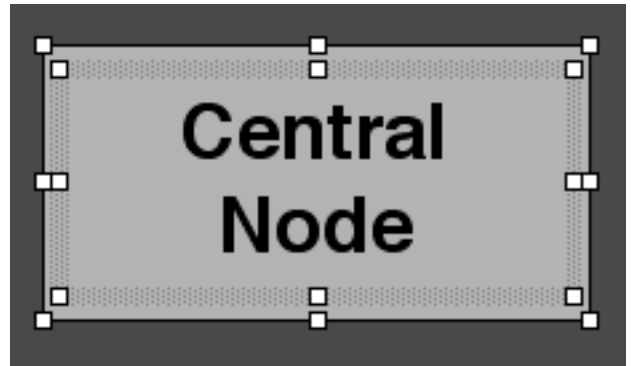


- 4) Click once on the second icon from the left on the “Align or Distribute” menu . The result will be that the text box and geometric shape will center align left and right in relationship to each other.
- F. Center the text box in the up/down dimension within the geometric shape. This is best done by “eyeballing” the placement.
  - 1) While holding down the “Option” key, click once over the text in the box. A shaded bounding box will appear around the text and eight small white square “handles” will appear around the text box.
  - 2) To move the box in the up/down dimension only, hold down the “Shift” key while you click and drag the text box. Click and drag the text box by the shaded bounding box. Since you can only see the outline of the text box while you are moving it, you may have to try several adjustments before you are satisfied.
- G. Group the center node and position it on the slide.
  - 1) Select the text box and the geometric shape box by holding down the “Option” key and clicking once on the text box. Release the “Option” key. Now, while holding down the “Shift” key click once on the geometric shape near the edge of the shape. Both the text box and the geometric shape should now be selected, indicated by the eight small white square handles around each object.
  - 2) On the “Drawing” toolbar at the bottom of the screen, click once on “Draw.” Select “Group” at the top of the menu that appears by clicking it once. Notice that the handles now indicate the boundaries of the two objects together. The text box and the geometric shape have been “grouped” and will be treated as a single unit by PowerPoint.

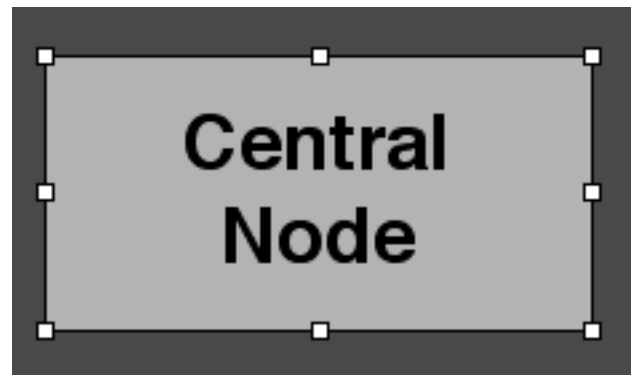


Choose "Group" from the "Draw" menu to group the geometric shape and the text box of the central node together. When grouped, animation effects will be applied to the two objects as if they were one object..

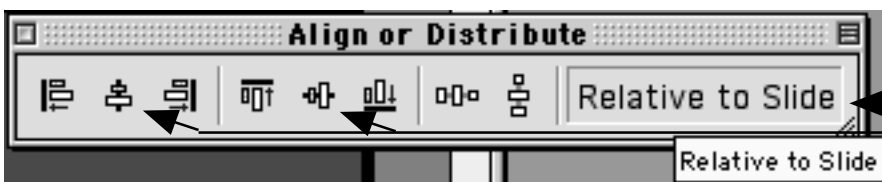
The ungrouped objects have a set of handles for each object.



The grouped objects have a single set of handles for both objects.



- 3) On the "Align or Distribute" toolbar bar, click once on "Relative to Slide."
- 4) To center the central node horizontally (left/right) on the slide, click once on the second icon from the left on the "Align or Distribute" toolbar.
- 5) To center the central node vertically (up/down) on the slide, click once on the fifth icon from the left on the "Align or Distribute" toolbar.





Click on "Relative to Slide" to align the grouped central node on the slide. Click on the "Align Center" icon. Then click on the "Align Middle" icon.

- 6) The central node should now be positioned exactly in the center of the slide.
- 7) On the "Align or Distribute" toolbar, click once on "Relative to Slide" to release this function.

**Congratulations! You now have a central node.**

6. Create the subnodes. Begin with the subnode with the longest word/phrase.
  - A. Select the shape of the subnode by clicking on the desired shape on the "Basic Shapes" menu box. The subnodes should be a different shape from the main node. For this example, select the oval. The cursor will change to a crosshairs when it is moved back over the slide area of the monitor. Click and drag on the slide area to create the chosen shape to the desired size on the slide.
  - B. Changing the color of the geometric shape.
    - 1) Select the geometric shape by clicking once on it. Eight small square white "handles" will appear around the shape, indicating that it is selected.

- 2) Go to the bottom menu and locate the "Fill Color" icon. This looks like a tiny paint bucket pouring paint . Click on the little arrow to the right of the "Fill Color" icon. A menu appears with a variety of possible colors. Select one of the colors visible on the menu by clicking once on the chosen color. Click once on the "OK" button to apply the color. Other colors are available by clicking on "More Fill Colors."
- C. Adding text to the subnode.
- 1) On the "Drawing" toolbar at the bottom of your monitor, select the text box tool. It looks like a tiny square with a small capital "A" . The cursor will change to an upside down "t" when it is moved over the slide area. Click and drag a box for the text over the rectangle you have just completed. When you release the mouse, a box with a border and a blinking text insertion cursor will appear. Type the desired text into the box.
  - 2) Format the text by changing the font style, size, alignment, and color as you would with text for a bulleted outline. You will want the text in the main node to be readable from a distance. The text must be selected to apply any changes to it.
    - a. With the cursor over the text you just entered, click once.
    - b. Select all of the text by hitting the "Command" key and the "A" key simultaneously.
    - c. With the text selected, choose a font from the font menu at the upper left-hand corner of the slide window. The default font is "Times." Click once on the tiny arrow to the right of the font menu. A menu of fonts will appear. If you have many fonts, the menu will have a small arrow at the top and/or bottom that indicates you can scroll up or down to reveal more choices. Scroll up or down by placing your cursor over the small arrow at the top or bottom of the window. Change the font to something simple and bold, with square ends to the letters instead of little points. "Arial" and "Helvetica" are good choices. Select the font you want to use by clicking once on it.
    - d. Change the size of the font. To the right of the font menu, there is a font size window that by default shows the numerals "24." This means the text you typed by default will be 24 points tall. For these subnodes, 24 point type, or even slightly smaller is okay because you will be creating an enlarged "pop-up" version of the subnodes to make them easily readable.
    - e. Change the style of the font. To the right of the font size menu, there are four icons represented by the letters "B," "I," "U," and "S." These stand for "Bold," "Italic," "Underline," and "Shadow" respectively. For this example, make the text bold by clicking once on the "B" icon.
    - f. Change the alignment of the text within the text box. To the right of the style icons there are three small alignment icons for left, center, and right alignment, in that order. For this example, center align the text within the text box by clicking once on the middle alignment icon.
  - 3) Resize the text box to fit the text. If the text doesn't fit within the text box that you drew, or breaks at an inconvenient place, you will need to resize the text box.
    - a. While holding down the "Option" key, click once on the text within the text block. A shaded bounding box will appear around the text and eight small white square "handles" will appear around the text box.
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E. Center the text in the geometric shape.

- 1) Select the text box and the geometric shape box by holding down the “Option” key and clicking once on the text box. Release the “Option” key. Now, while holding down the “Shift” key click once on the geometric shape near the edge of the shape. Both the text box and the geometric shape should now be selected, indicated by the eight small white square handles around each object.
- 2) On the “Drawing” toolbar at the bottom of the screen, Go to “Draw” menu item on the left hand side of the toolbar and the click once The “Draw” menu box will appear.
- 3) Scroll to the “Align or Distribute” menu item. Click and hold the mouse key down and “tear off” the “Align or Distribute” menu as you did with the “Autoshapes” menu. To review how to tear off a menu, see step 5.A.(1) above. When you tear off this menu, it will change to a bar with a number icons instead of words.
- 4) Click once on the second icon from the left on the “Align or Distribute” menu. The result will be that the text box and geometric shape will center align left and right in relationship to each other.

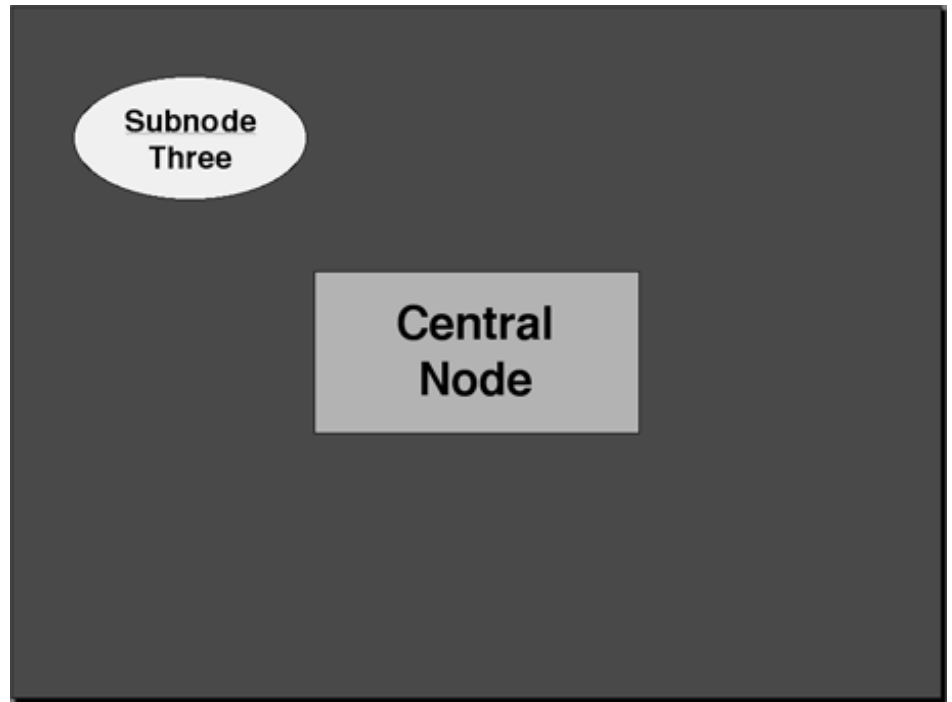
F. Center the text box in the up/down dimension within the geometric shape. This is best done by “eyeballing” the placement.

- 1) While holding down the “Option” key, click once over the text in the box. A shaded bounding box will appear around the text and eight small white square “handles” will appear around the text box.
- 2) To move the box in the up/down dimension only, hold down the “Shift” key while you click and drag the text box. Since you can only see the outline of the text box while you are moving it, you may have to try several adjustments before you are satisfied.

G. Position the first subnode on the slide.

- 1) Select the text box and the geometric shape box that make up the first subnode you made by holding down the “Option” key and clicking once on the text box. Release the “Option” key. Now, while holding down the “Shift” key click once on the geometric shape near the edge of the shape. Both the text box and the geometric shape should now be selected, indicated by the eight small white square handles around each object.
- 2) Click and drag the text box and the geometric shape together to the desired location on the slide. For this example, place the subnode in the upper left hand area of the slide, above and to the left of the central node. Leave some space between the subnode and the edge of the slide so the subnode won't look like it's sticking to the top or left side edge of the slide.

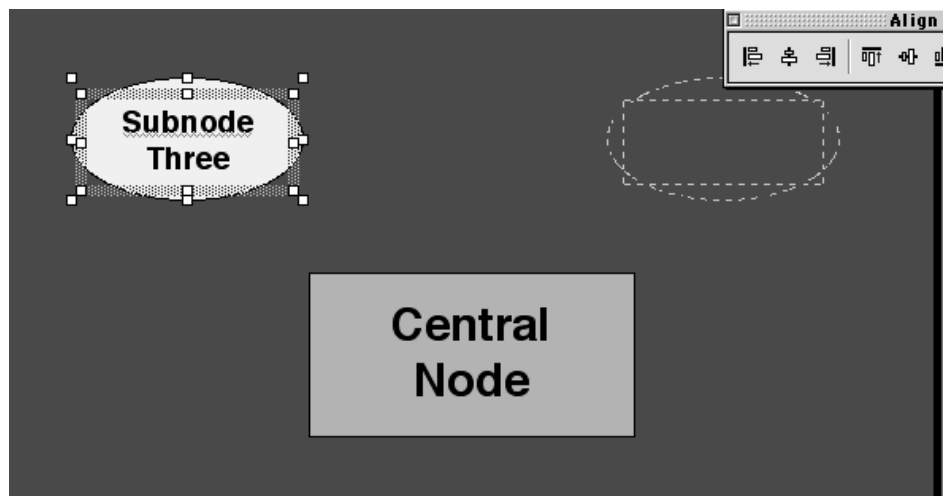
Position the first subnode in the upper left-hand quadrant of the slide. Don't place it so close to the top or left edges that it looks like it's sticking to the edge.



#### H. Create additional subnodes.

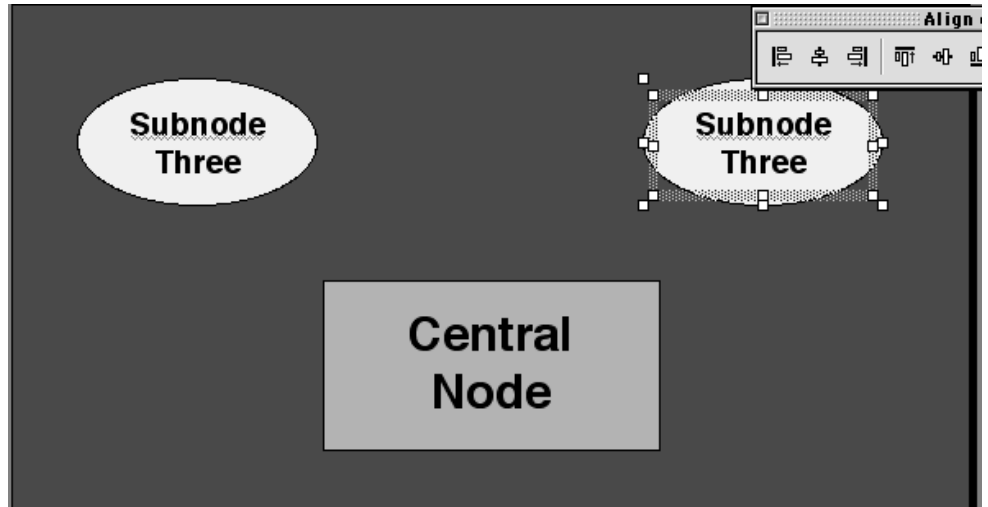
- 1) Select the text box and the geometric shape box that make up the first subnode you made by holding down the "Option" key and clicking once on the text box. Release the "Option" key. Now, while holding down the "Shift" key click once on the geometric shape near the edge of the shape. Both the text box and the geometric shape should now be selected, indicated by the eight small white square handles around each object. Now you can easily "drag and drop" additional copies of this subnode.
- 2) With all elements of the subnode selected, hold down the "Option" key AND the "Shift" key, and click and drag the selected objects together to the desired location on the slide. Notice that holding down the "Shift" key keeps the objects moving in a straight line. For the first copy, drag the subnode to the right and position the new subnode as did the first subnode, except on the right-hand side of the slide.

Drag and drop a copy of the first subnode. Hold down the "Shift" key to restrain the movement to one dimension (left/right). Hold down the "Option" key to create a copy of the dragged object.



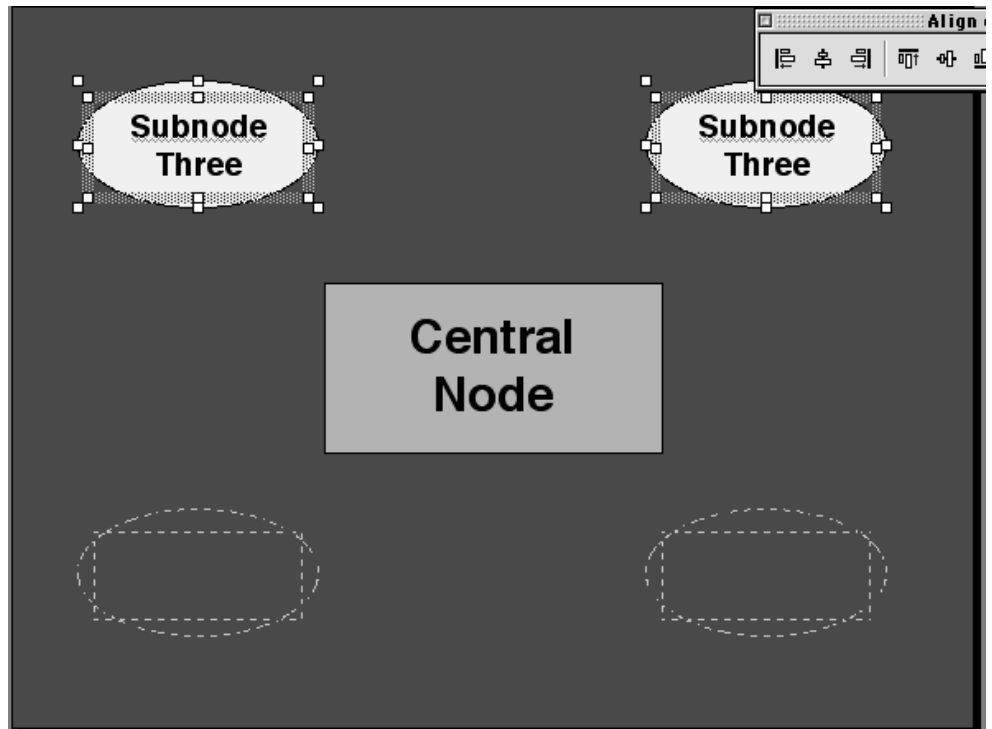
- 3) When the mouse button is released, a copy of the object is made at the location you released the mouse button.

The result of the “drag and drop” while holding down the “Shift” and “Option” key is a copy of the first subnode in the location where you released the mouse button. The copy will be perfectly aligned with the original.



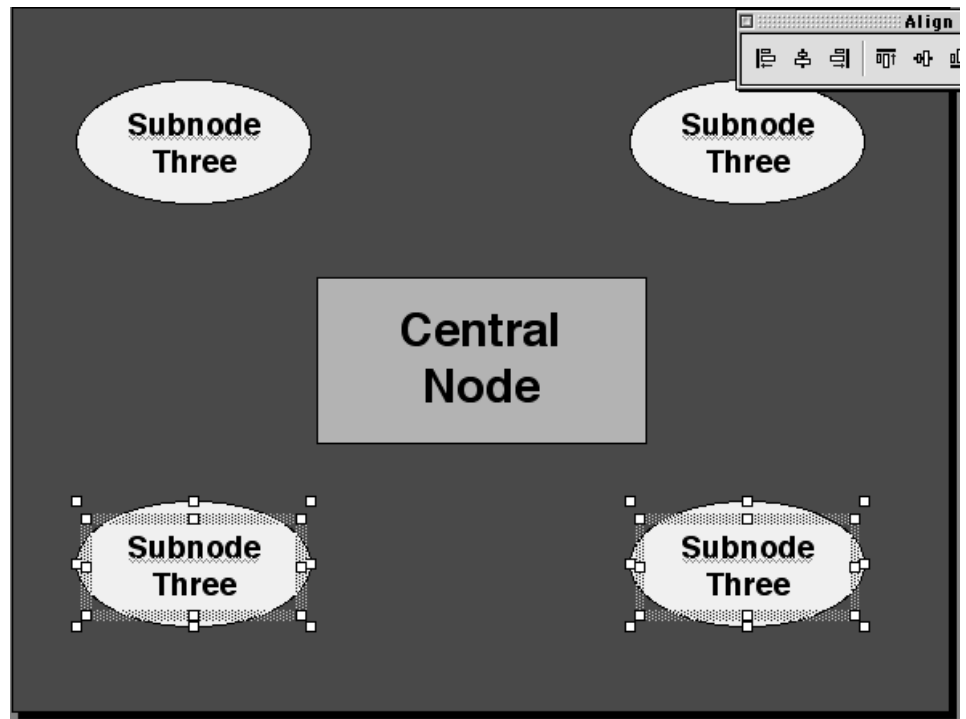
- 4) Make the final two copies of the subnode at once.
- Select the text boxes and geometric shapes of the first two subnodes by holding down the “Option” key and clicking once on one of the text boxes of one of the subnodes. Release the “Option” key. While holding down the “Shift” key, click once each on the remaining text box and the geometric shapes of the two subnodes.
  - With all elements of the two subnodes selected, hold down the “Option” key AND the “Shift” key, and click and drag the selected objects together to the desired location by the main node on the slide. For these last two copies of the subnode, drag the subnodes down and position the two new subnodes below the central node, about the same distance from the central node.

Drag and drop a copy of the first two subnodes. Hold down the “Shift” key to restrain the movement to one dimension (up/down). Hold down the “Option” key to create a copy of the dragged objects.





The result of the “drag and drop” while holding down the “Shift” and “Option” key is a copy of the first two subnodes in the location where you released the mouse button. The copies will be perfectly aligned with the originals.

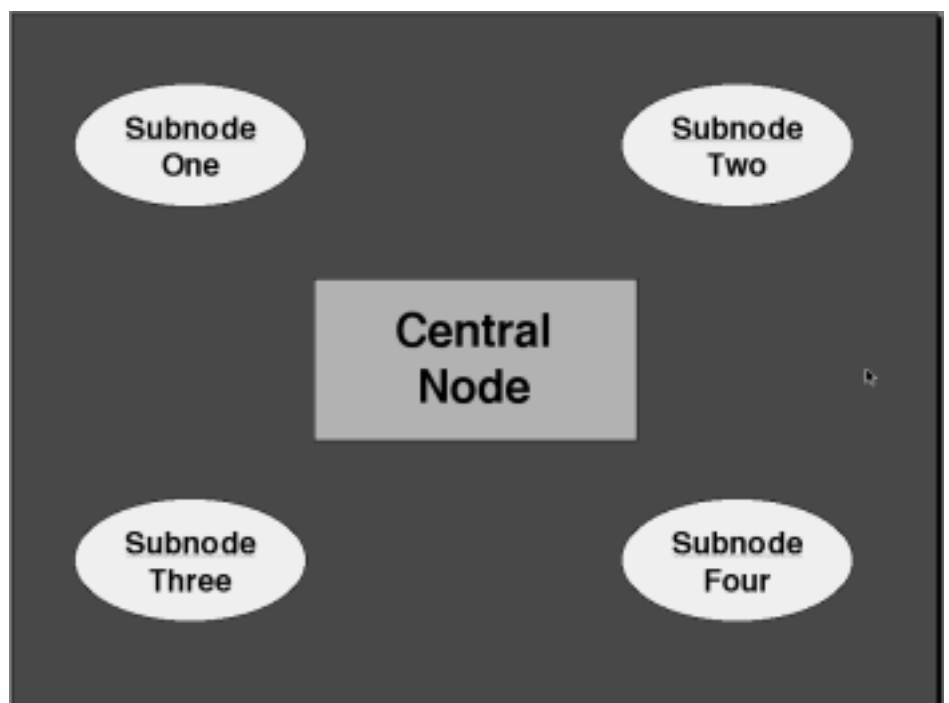


I. Change the text in the additional subnodes.

- 1) Click on the text box to select the word(s) that need to be changed.
  - a. To select all the text in the text box, hit the “Command” key and the “A” key simultaneously.
  - b. To select a single word, double click on the word.
  - c. To select several words, but not the entire text, click and drag the cursor over the text you want to select.
- 2) Type the new word(s).


NOTE: All the subnodes should be positioned at the same distance from the central node.

Change the text within each subnode.



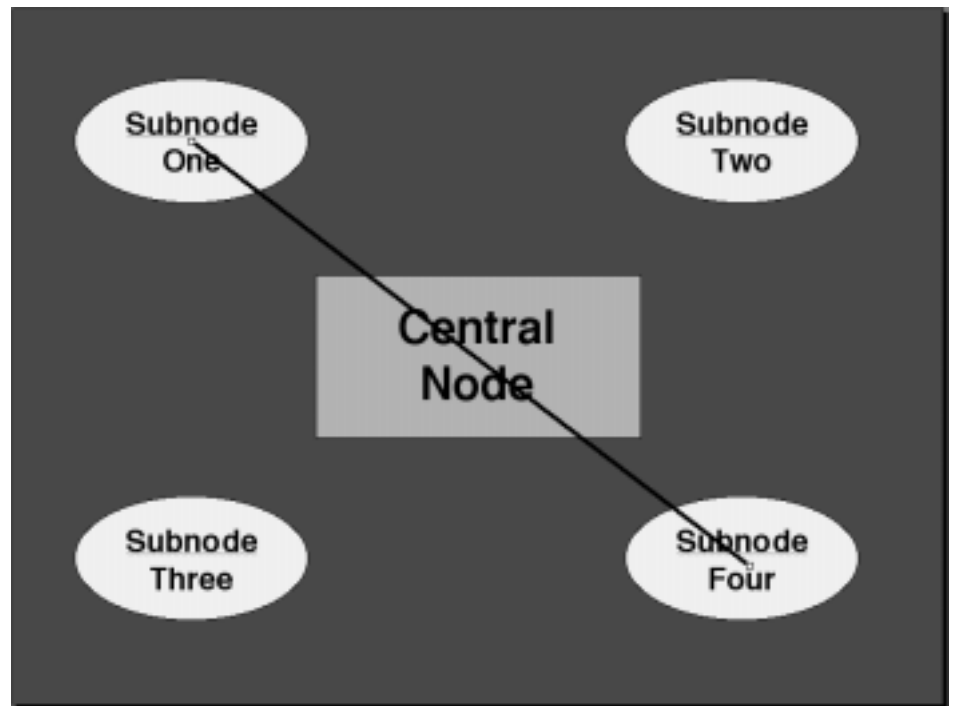
Congratulations! You now have the main node and subnodes.

7. Connect the subnodes and main node with lines.

A. Go to the "Drawing" toolbar at the bottom of the screen. To the right of "Autoshapes" there is a line tool (diagonal line enclosed in a square) .

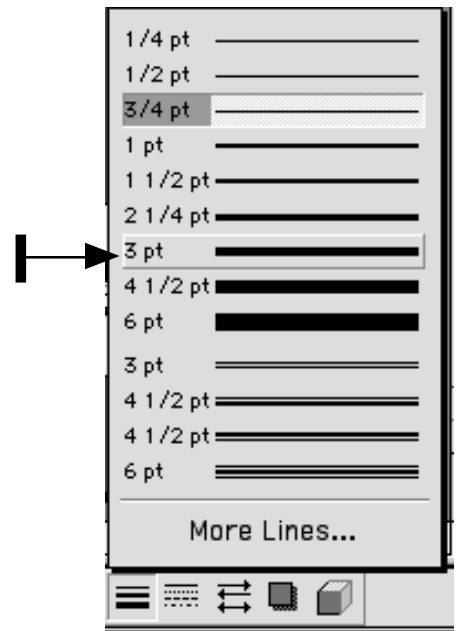
- 1) If you need to draw more than one line or arrow, double click on the line icon. The icon will turn gray and remain gray when the cursor is moved over the slide area. This will allow you to draw more than one line without having to reselect the line tool. The cursor will now turn into a cross hair when it is moved over the slide area. To change the cursor back into an arrow, click once on the line or arrow icon. If you need to draw only one line, click only once on the line tool. When you are finished drawing the line, the cursor will automatically turn back into an arrow shape.
- 2) In this example, the lines will be drawn from approximately the center of the top left oval to the approximately the center of the bottom right oval.
  - a. Draw the line by clicking and dragging the mouse from the center of the upper left oval to the center of the lower right oval.

With the line tool, draw a line from the center of the upper left subnode to the center of the lower right subnode.



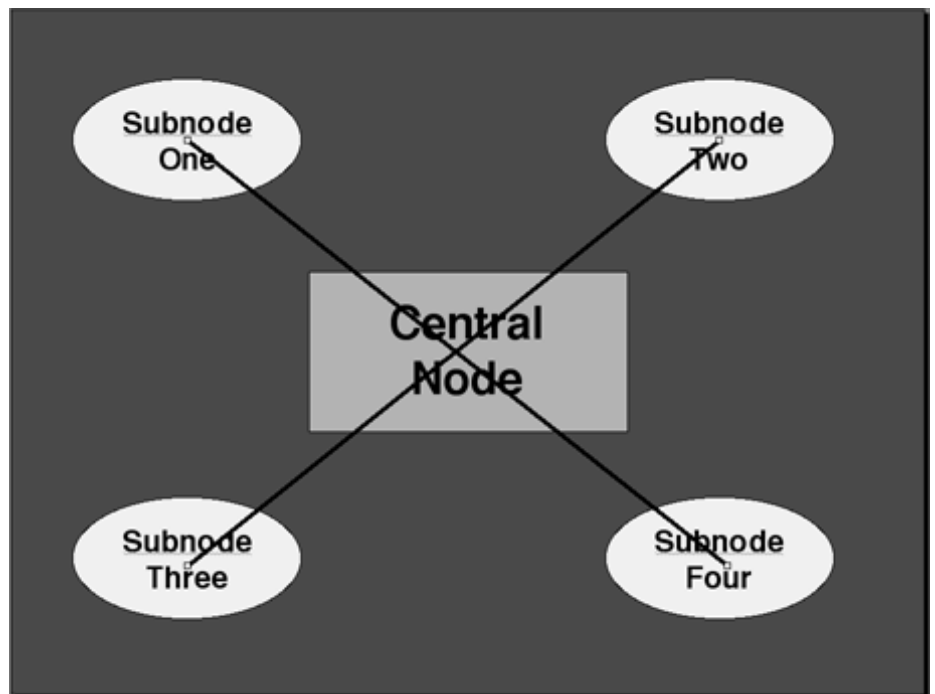
- b. Repeat for all the lines.
- c. Change the line thickness. Select all of the lines to be changed to the same thickness.
  - Click on one of the lines of the word picture to select it.
  - To select additional lines together, hold down the "Shift" key and click on each additional line to be selected.
- d. Change the desired thickness of the lines.
  - Go to the "Drawing" toolbar at the bottom of the screen and select the line thickness icon (three horizontal lines with three different thicknesses). The line thickness menu appears.
  - Move the cursor to the desired thickness. For this example make the lines 3 points thick. Click on the line with "3 pt" beside it.
  - All of the selected lines will change to the selected thickness.

With the lines selected, choose "3 pt" from the "Line Thickness" menu.



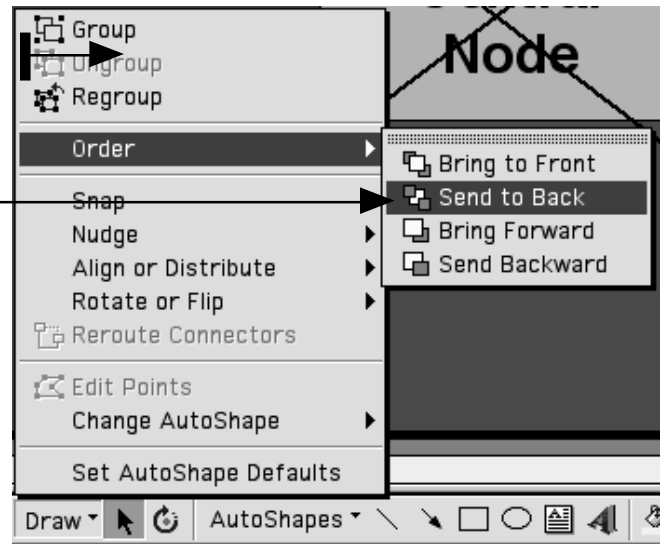
- d. At this point the lines appear to be layered on top of the nodes and subnodes. These lines must be moved "behind" the nodes.

Lines appear "on top." These lines need to be moved "behind" the nodes.

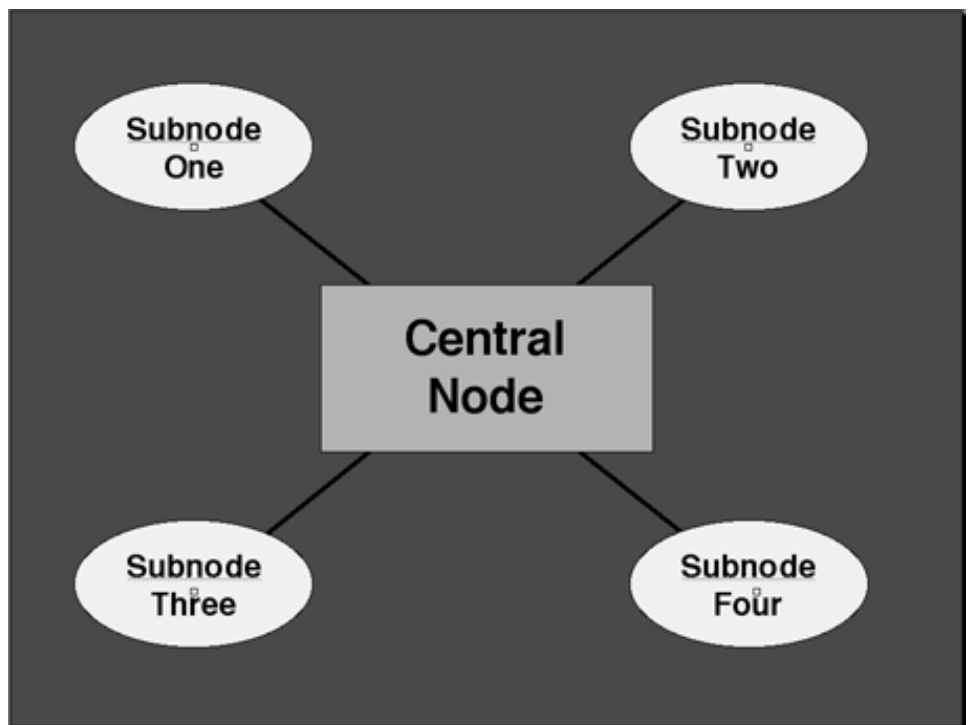


- Make sure all of the lines are still selected. On the left hand end of the "Drawing" toolbar at the bottom of the screen, click once on "Draw." The "Draw" menu appears. Move the cursor to the menu item "Order." Move the cursor to "Send to back" on the submenu that appears and click once.
- The lines should now appear "behind" the nodes of the word picture.

To move the lines “behind” the subnodes, select “Send to Back” from the “Order” menu.



The lines now appear “behind” the nodes.



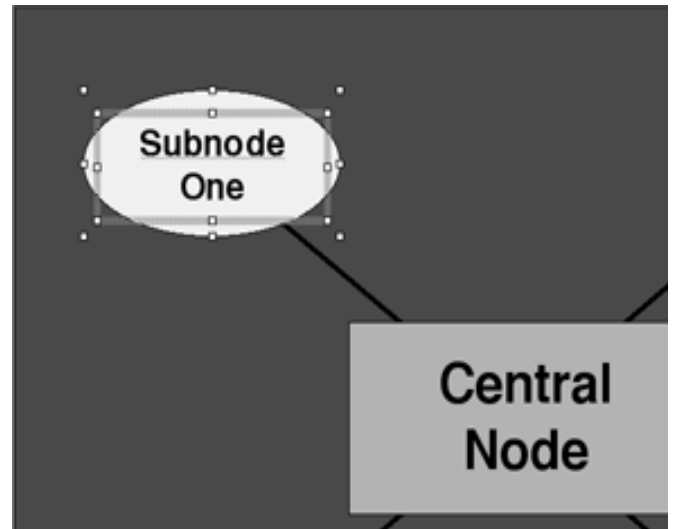
Congratulations! Your word picture is complete.

### Step Three: Bringing the word picture to life with animation

Using the word picture that you have just created, you will learn how to animate it for the purpose of capturing and focusing attention.

8. Make an enlarged copy of the subnodes.
  - A. Select the upper left subnode. Remember that each of the nodes contains both the geometric shape and text box.
    - 1) Select the text box and geometric shape of the first subnode by holding down the “Option” key and clicking once on the text box. Release the “Option” key. Now, while holding down the “Shift” key click once on the geometric shape, near the edge of the shape. Both the text box

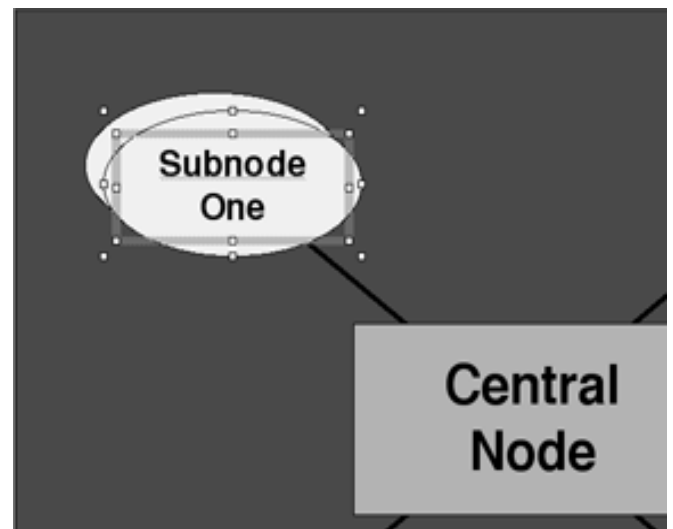
Select the text box and geometric shape of the first subnode.



and the geometric shape should now be selected, indicated by the eight small white square handles around each object.

- 2) Hit the "Command" key and the "C" key simultaneously (or select "Copy" from the "Edit" menu item on the top menu bar) to copy the selected objects. Hit the "Command" key and the "V" key simultaneously (or select "Paste" from the "Edit" menu item on the top menu bar) to paste a new copy of the selected items into the slide. The copy will appear slightly to the right and below the original and will appear to be "on top" of the original.

Copy and paste. The copy of the first subnode will appear slightly below and to the right of the original subnode.

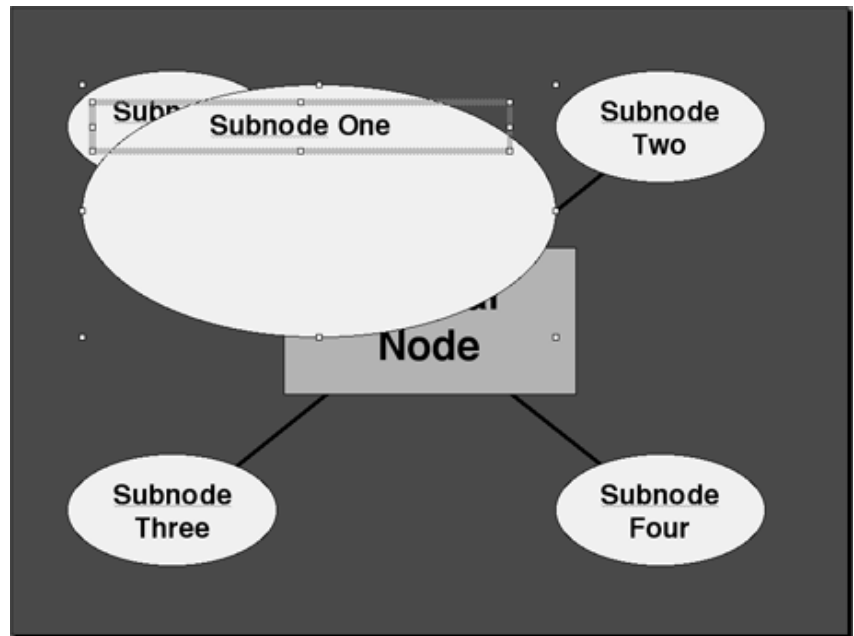


#### B. Enlarge the copy of the subnode.

- 1) Select the text box and geometric shape of the COPY by holding down the "Option" key and clicking once on the text box of the COPY. Release the "Option" key. Now, while holding down the "Shift" key click once on the geometric shape of the COPY, near the edge of the shape. Both the text box and the geometric shape should now be selected, indicated by the eight small white square handles around each object.
- 2) While holding down the "Shift" key, click and drag the lower right corner handle of the GEOMETRIC SHAPE diagonally toward the center of the slide until the geometric shape is the desired size. (NOTE: This action will enlarge the geometric shape and the size of the TEXT BOX but it will not enlarge the size of the text within the text box. You will enlarge the text separately.) The new enlarged subnode should be very large to be easily seen from a distance.

However, be sure that the new large subnode fits on the slide in its entirety. It should not “fall off” any edge of the slide. The shape and words may partially cover the main node. This is okay.

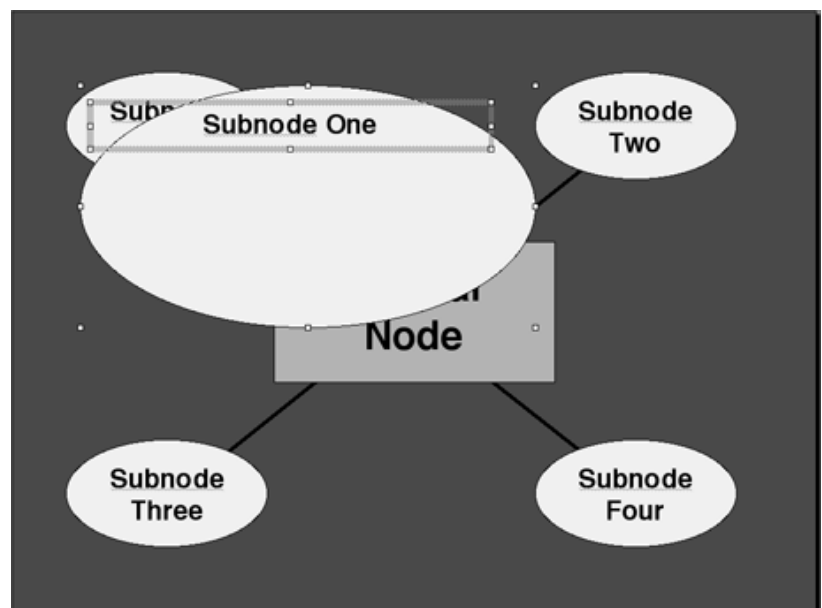
While holding down the “Shift” key, click and drag the lower right corner handle of the GEOMETRIC SHAPE diagonally toward the center of the slide until the geometric shape is the desired size. (NOTE: This action will enlarge the geometric shape and the size of the TEXT BOX but it will not enlarge the size of the text within the text box. You will enlarge the text separately.) The new enlarged subnode should be very large to be easily seen from a distance. However, be sure that the new large subnode fits on the slide in its entirety. It should not “fall off” any edge of the slide. The shape and words may partially cover the main node. This is okay.



- 3) Realign the text box with the geometric shape.
  - a. Select the text box and the geometric shape box by holding down the “Option” key and clicking once on the text box. Release the “Option” key. Now, while holding down the “Shift” key click once on the geometric shape near the edge of the shape. Both the text box and the geometric shape should now be selected, indicated by the eight small white square handles around each object.
  - b. Click once on the second icon from the left on the “Align or Distribute” menu. The result will be that the text box and geometric shape will center align left and right in relationship to each other.
  - c. Center the text box in the up/down dimension within the geometric shape. This is best done by “eyeballing” the placement.
  - d. While holding down the “Option” key, click once over the text in the box. A shaded bounding box will appear around the text and eight small white square “handles” will appear around the text box.
  - e. To move the box in the up/down dimension only, hold down the “Shift” key while you click and drag the text box. Since you can only see the outline of the text box while you are moving it, you may have to try several adjustments before you are satisfied.
- 4) Change the size of the text. To the right of the font menu, there is a font size window that by default shows the numerals “24.” This means the text you typed by default will be 24 points tall. You will probably want to make the text bigger than this so the text can be seen at a distance. Click once on the tiny arrow to the right of the font size window. A menu of font sizes will appear. There will be a small arrow at the bottom of the selection list indicating that more choices are available by scrolling. To scroll the menu, place your cursor over the small arrow. For this example, choose 48 point (or larger) by clicking once on “48” (or a larger point size). Try different sizes until the text has approximately the same appearance as the small subnode, but BIG.

- 5) Change the color of the large geometric shape. You will usually want the enlarged version of the subnode to be more intense than the smaller version. Make the larger version darker with light text, or brighter with dark or black text.
    - a. Select the geometric shape by clicking once on it near the edge of the shape. Eight small square white "handles" will appear around the shape, indicating that it is selected.
    - b. Go to the bottom menu and locate the "Fill Color" icon. This looks like a tiny paint bucket pouring paint. Click on the little arrow to the right of the "Fill Color" icon. A menu appears with a variety of possible colors. Select one of the colors visible on the menu by clicking once on the chosen color. Click once on the "OK" button to apply the color. Other colors are available by clicking on "More Fill Colors."
  - 6) Reposition the large subnode to the desired location at the end of the animation.
    - a. Select the text box and the geometric shape box that make up the first large subnode you made by holding down the "Option" key and clicking once on the text box. Release the "Option" key. Now, while holding down the "Shift" key click once on the geometric shape near the edge of the shape. Both the text box and the geometric shape should now be selected, indicated by the eight small white square handles around each object.
    - b. Click and drag the text box and the geometric shape together to the desired location on the slide. For this example, place the subnode in the upper left hand area of the slide, covering the small subnode beneath it.
- C. Make the first copy of the large subnode.
- 1) Select the text box and the geometric shape box that make up the first large subnode you made by holding down the "Option" key and clicking once on the text box. Release the "Option" key. Now, while holding down the "Shift" key click once on the geometric shape near the edge of the shape. Both the text box and the geometric shape should now be selected, indicated by the eight small white square handles around each object. Now you can easily "drag and drop" additional copies of this subnode.
  - 2) With all elements of the subnode selected, hold down the "Option" key AND the "Shift" key, and click and drag the selected objects together to the desired location on the slide. For this first copy, drag the subnode to the right and position the new subnode as you did the first subnode, except on the right-hand side of the slide, covering the small subnode on the upper right hand side of the slide.
  - 3) When the mouse button is released, a copy of the object is made at the location you released the mouse button.

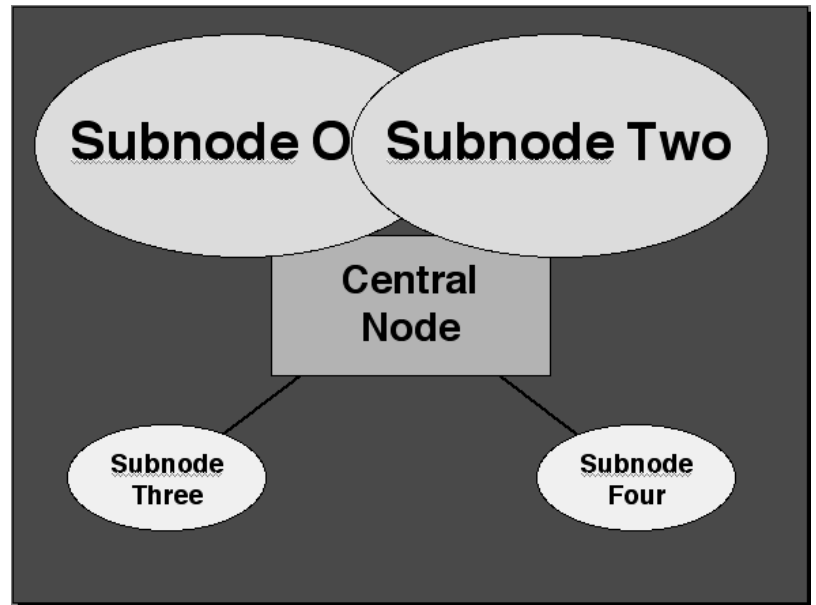
Select the text box and the geometric shape of the first large subnode you made. Drag and drop a copy of the large subnode over the second small subnode.



D. Change the text of this new large subnode to correspond to the text of the small subnode beneath it.

- 1) Click on the text box to select the word(s) that need to be changed.
  - a. To select all the text in the text box, hit the "Command" key and the "A" key simultaneously.
  - b. To select a single word, double click on the word.
  - c. To select several words, but not the entire text, click and drag the cursor over the text you want to select.
- 2) Type the new word(s).

Change the text in the second large subnode to correspond to the text in the second small subnode.



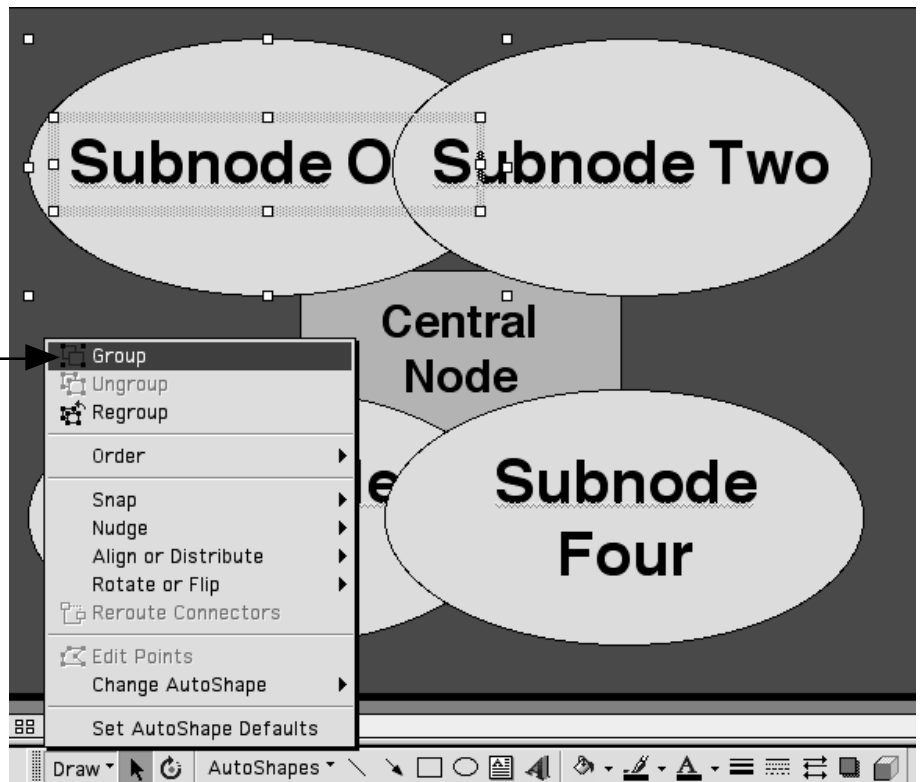
- E. Repeat steps C and D above to make the last two large copies of the subnode, placing the large copies over the small subnodes at the bottom of the slide and changing the text to correspond to the text on the small subnode that the large subnode covers.
- F. The large subnodes will appear to be layered "on top" of the small subnodes and may overlap each other. This is okay.

## The Animation

9. Group the large subnodes to be animated.
  - A. Group the geometric shape and text box for each subnode.
    - 1) Select the text box and the geometric shape box that make up the first large subnode you made by holding down the "Option" key and clicking once on the text box. Release the "Option" key. Now, while holding down the "Shift" key click once on the geometric shape near the edge of the shape. Both the text box and the geometric shape should now be selected, indicated by the eight small white square handles around each object.
    - 2) Go to the "Drawing" toolbar at the bottom of the screen and click once on the "Draw" menu item. The "Draw" menu will appear. Click once on "Group" at top of menu.



Group the text box and the geometric shape for each of the large subnodes.



B. Repeat for each of the three remaining large subnodes to be animated.

#### 10. Animate the subnodes

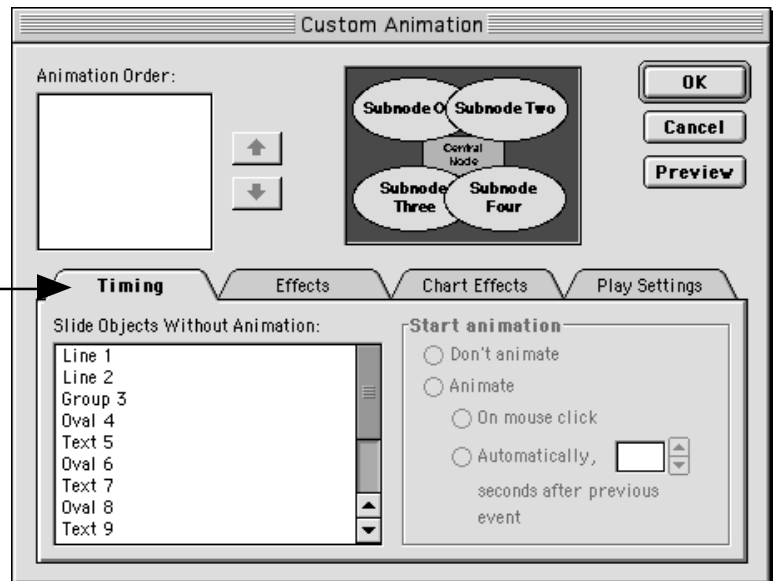
A. From the "Slide Show" menu item on the top menu bar select "Custom Animation...". The "Custom Animation" dialogue box will appear.

Select "Custom Animation..." from the "Slide Show" menu.



B. Click once on the "Timing" tab (on the left hand side of the box) to bring it to the front. On the "Timing" tab, a list of objects will appear in the window entitled "Slide objects without animation." This window lists all of the objects on the slide in the order in which they were created. Since the geometric shapes and text boxes of the subnodes you want to animate were created last, they will be located at the bottom of the list and may not immediately appear in the window.

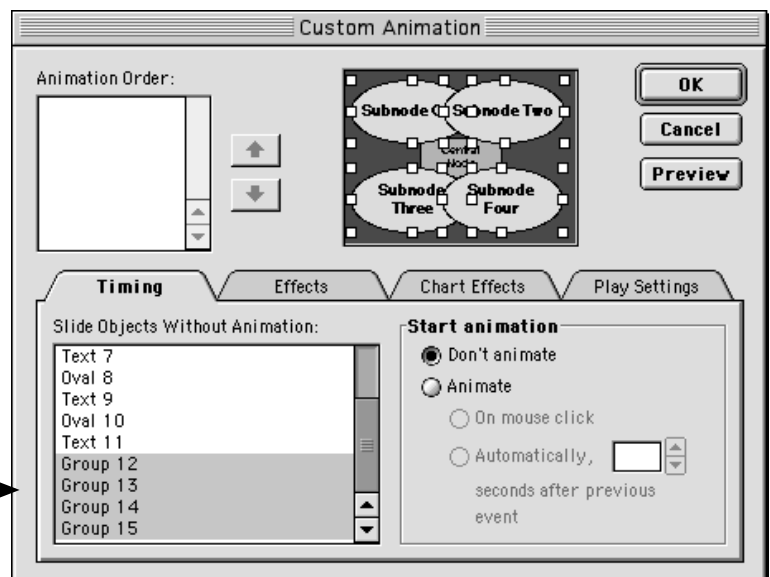
Click once on the "Timing" tab to bring it to the front.



C. Scroll the "Slide objects without animation" window until objects called "Group" followed by a number appear.

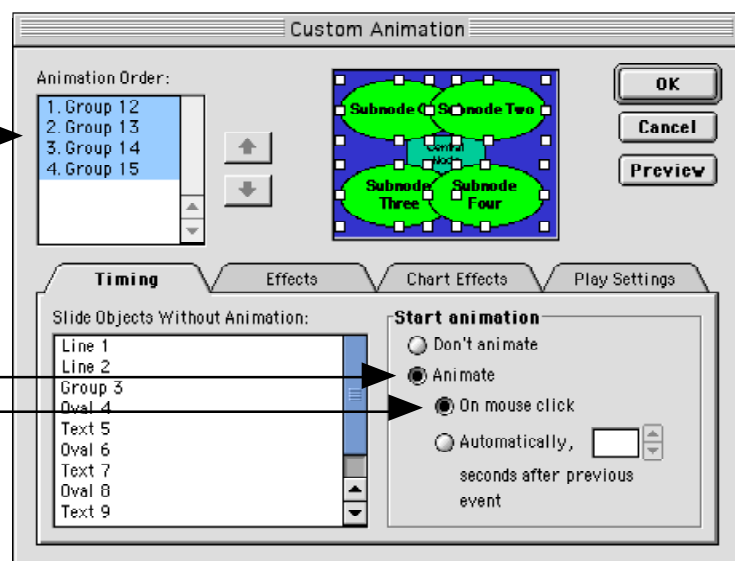
- 1) There should be the same number of groups listed as you created in step 9 above plus one: one group for the central node and a total of four groups for the four large subnodes. The group for the central node will appear higher in the list than the four groups for the four large subnodes. Since you won't be animating the central node, you can ignore the first group in the list. The four groups for the four large subnodes should be the last four items on the "Slide Objects Without Animation" list.
- 2) Click once on the first large subnode group that appears on the list. Holding down the "Shift" key down, click once on each group that you want to animate (there should be four groups, one for each of the large subnodes you created). These groups will be highlighted, indicating that they are selected. Handles (small white squares) will appear around each of the selected groups in the "Preview" window that shows a miniature representation of the slide you are working on. Once you have selected all the groups you want to animate, release the "Shift" key.

Scroll the "Slide Objects Without Animation" window and select the groups you want to animate. There should be four groups analogous to the four large subnodes.



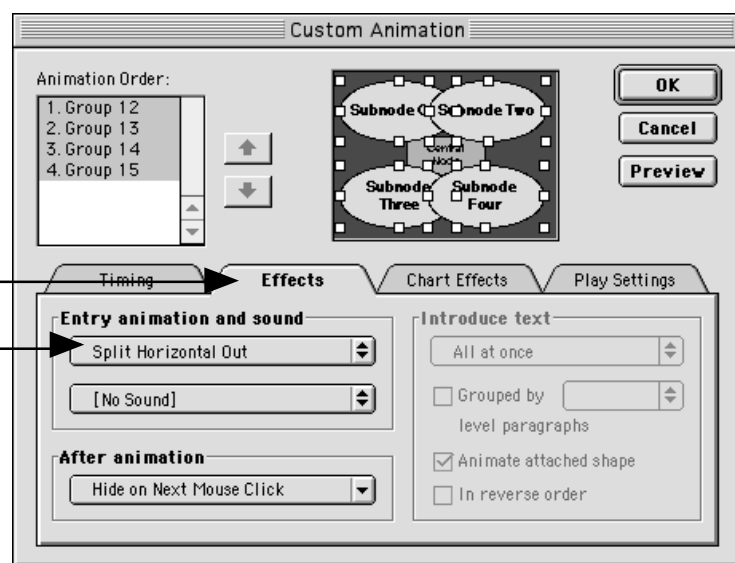
- 3) On the right half of the “Timing” tab, click once on the button (circle) next to “Animate.” The button will turn black. Note that the “On mouse click” option is automatically selected (the circle next to this option will turn black also) and selected groups in the “Objects without animation” window will move up to the upper left window called “Animation Order” in the “Custom Animation” dialogue box.

Click on the button next to “Animate.” The groups will be moved from the “Slide Objects Without Animation” window to the “Animation Order” window. The groups will become selected in the preview window. The default selection for starting an animation is “On mouse click.” Leave this default selected.



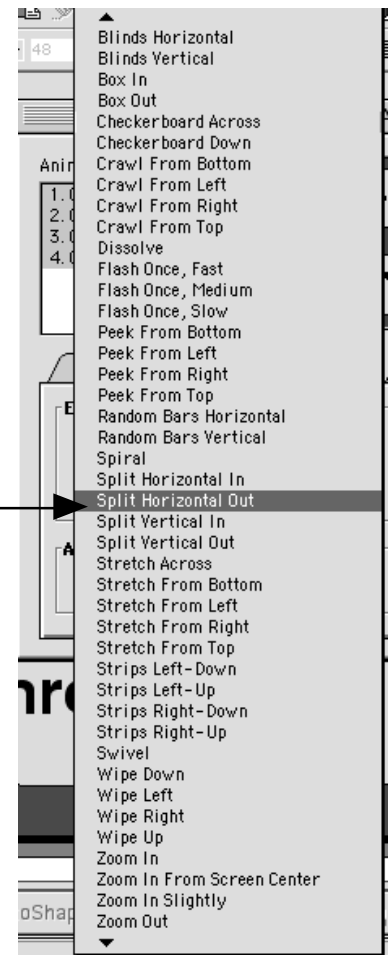
- 4) Click once on the “Effects” tab (to the right of the “Timing” tab). You will see two sections on left hand side of the “Effects” tab: “Entry animation and sound” and “After animation.” Check to make sure that the groups in the “Animation Order” window are still highlighted. If not, reselect by clicking on the first group and, holding the “Shift” key down, clicking on each of the additional groups.

Click on the “Effects” tab to bring it to the front. Click once on the menu that shows “Fly from left.” A menu will open showing the possible visual effects.



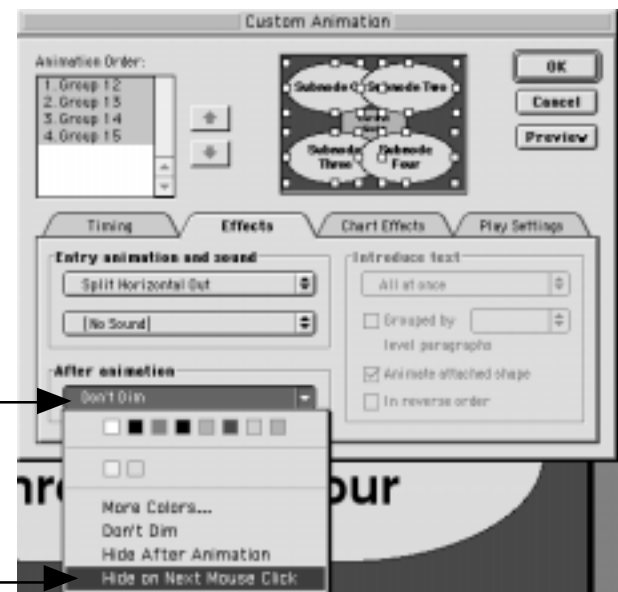
- 5) Under “Entry Animation and Sound” click once on the menu that shows “Fly from left.” A menu will open showing the possible visual effects. There is a small arrow at the bottom of the menu box that indicates that there are more effects available. By moving the cursor onto the small arrow, the menu will scroll down to show the hidden selections.

For this tutorial, choose "Split Horizontal Out."



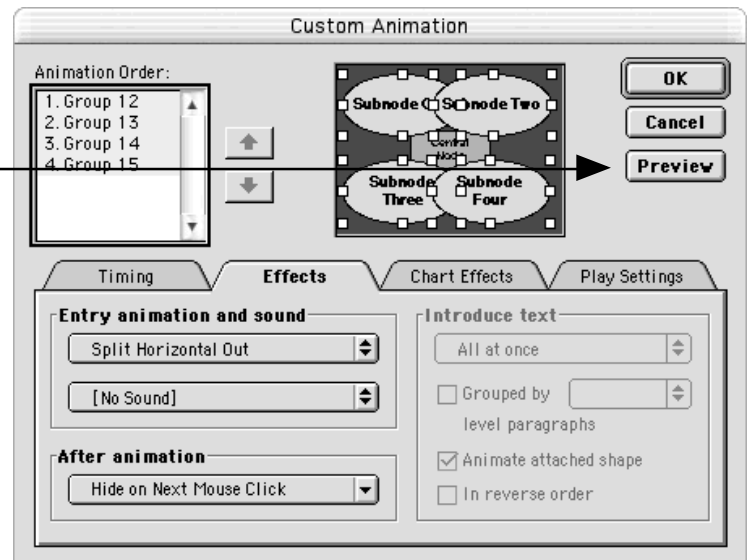
- 6) Click once on an effect. For this example, choose "Split Horizontal Out." This effect will be applied to all four of the selected groups and will appear in the small menu bar where "Fly from left" was.
- 7) Make sure that the groups are still selected. In the "After Animation Section" of the "Effects" tab, click once on the menu that shows "Don't Dim." A menu will appear. Click once on the bottom item on the menu called "Hide on Next Mouse Click." This animation effect will be applied to all of the selected groups and will appear in the small menu bar where "Don't Dim" was.

Click on the "After animation" menu to reveal the possible effects. Select the "Hide on Next Mouse Click" option.



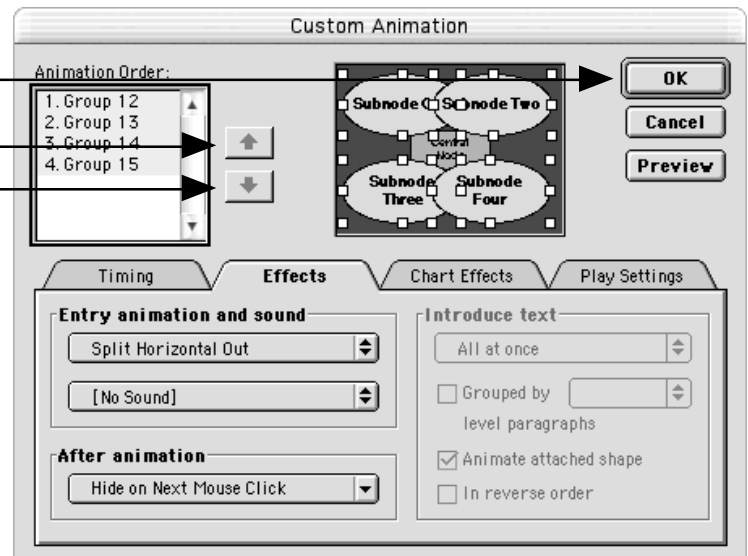
- D. Preview your slide by clicking once on the “Preview” button in the upper right hand section of the “Custom Animation” dialogue box. In the Preview window, you will see each of the groups animate in order using the effects that you applied to them. The groups will be animated in the order that they are listed in the “Animation Order” window.

Click on the “Preview” button to see a quick preview of your animation in the Preview window.



- 1) If you would like to change the animation order of one or more of the groups, click once on the group that you would like to reorder in the “Animation Order” window. (If the groups are still selected, you may have to deselect them by clicking once in the “Animation Order” window away from the groups.) Move the selected group up or down in the “Animation Order” window by clicking on the up or down arrow to the right of the “Animation Order” window.
  - 2) Preview the changes by clicking on the “Preview” button.
  - 3) Keep reordering the groups until they animate in the order that you want.
- E. Once you are satisfied with the animation order, click once on the “OK” button in the upper right hand corner of the “Custom Animation” dialogue box.

Change the animation order of a group by selecting it in the “Animation Order” window and clicking the up or down arrow to change its position in the animation order. The groups will be animated in the order in which they appear in the “Animation Order” window. Once you are satisfied with the animation order and the animation effects, click the “OK” button to apply your settings.



- G. View the full slide on the computer screen by clicking once on the "Slide Show" menu at the top of the screen. Click once on the first item of the menu called "View Show." View the animation by clicking the mouse once to animate each group.

Select "View Show" from the "Slide Show" menu to see the animation at full size on your computer screen. Click the mouse once to activate the animation of each of the large subnodes.



**Congratulations! You have created a "pop-up" word picture PowerPoint slide.**

**Now have fun by experiment with various word picture configurations and different animation effects.**